

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF NORTH	)	CASE NO.
LOGAN WATER DISTRICT #1 FOR A RATE	)	2021-00286
ADJUSTMENT PURSUANT TO 807 KAR 5:076	)	

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of August 2, 2021, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's August 2, 2021 Order, North Logan Water District #1 (North Logan District #1) is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report. The Commission directs North Logan District #1 to the Commission's July 22, 2021 Order in Case No. 2020-00085<sup>1</sup> regarding filings with the Commission.



Linda C. Bridwell, PE  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, KY 40602

DATED OCT 21 2021

cc: Parties of Record

---

<sup>1</sup> Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

STAFF REPORT  
ON  
NORTH LOGAN WATER DISTRICT #1  
CASE NO. 2021-00286

North Logan Water District #1 (North Logan District #1) is a water utility organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides retail water service to approximately 554 residential customers and 16 commercial customers that reside in Logan County, Kentucky.<sup>2</sup> On July 16, 2021, North Logan District #1 filed an application with the Commission requesting to adjust its water rates pursuant to 807 KAR 5:076. The application was filed pursuant to the Commission's Order in Case No. 2020-00221.<sup>3</sup> To ensure the orderly review of the application, the Commission established a procedural schedule by Order dated August 2, 2021. Commission Staff (Staff) issued its first round of formal discovery (Staff's First Request) on August 26, 2021. North Logan District #1 filed its response to Staff's First Request on September 10, 2021.

The Commission notes that in its 2020 Annual Report, North Logan District #1 reported a water loss of 21.12 percent.<sup>4</sup> Commission regulation 807 KAR 5:066(6)(3) states that for ratemaking purposes a utility's water loss shall not exceed 15 percent of

---

<sup>2</sup> *Annual Report of North Logan District #1 to the Public Service Commission for the Calendar Year Ended December 31, 2020* (Annual Report) at 12 and 49.

<sup>3</sup> Case No. 2020-00221, *Electronic Purchased Water Adjustment Filing of North Logan Water District #1, Inc.* (Ky. PSC Aug. 5, 2020) at 5, ordering paragraph 5.

<sup>4</sup> Annual Report at 57.

total water produced and purchased, excluding water consumed by a utility in its own operations.

The Commission is placing greater emphasis on monitoring utilities that consistently exceed the 15 percent unaccounted-for water loss threshold and strongly encourages North Logan District #1 to pursue reasonable actions to reduce its unaccounted-for water loss. At a 21.12 percent water loss, the annual cost to North Logan District #1 is \$11,355,<sup>5</sup> while the total cost of water loss is \$39,175.<sup>6</sup> Failure by North Logan District #1 to make significant process towards reducing unaccounted-for water loss may cause the Commission to pursue additional action with the utility.

To comply with the requirements of 807 KAR 5:076, Section 9,<sup>7</sup> North Logan District #1 used the calendar year ended December 31, 2020, as the basis for its

5

	Purchased Water	Purchased Power
Purchased Water from 2019 Annual Report	\$ 178,135	\$ 7,332
Times: Water loss Above 15 Percent	-6.1224%	-6.1224%
Excess Water Loss Reductions	<u>\$ (10,906)</u>	<u>\$ (449)</u>
Total		<u><u>\$ (11,355)</u></u>

6

	Purchased Water	Purchased Power
Purchased Water from 2019 Annual Report	\$ 178,135	\$ 7,332
Times: Total Water loss	21.1224%	21.1224%
Total Water Loss	<u>\$ (37,626)</u>	<u>\$ (1,549)</u>
Total		<u><u>\$ (39,175)</u></u>

<sup>7</sup> The reasonableness of the proposed rates shall be determined using a 12-month historical test period, adjusted for known and measureable changes, that coincides with the reporting period of the applicant's annual report for the immediate past year.

application. Using its pro forma test-year operations, North Logan District #1 determined that a revenue increase of \$41,494, or 11.31 percent over test-year normalized revenues of \$366,975, was warranted<sup>8</sup> as shown in the table below. The revised rates requested by North Logan District #1 would increase the residential monthly bill of a typical residential customer using 3,000 gallons per month by \$3.80 from \$33.62 to \$37.42, or approximately 11.30 percent.<sup>9</sup>

	North Logan Water District #1
Pro Forma Operating Expenses	\$ 428,779
Plus: Avg. Annual Principal and Interest Payments	7,433
Additional Working Capital	<u>1,487</u>
Total Revenues Requirement	437,698
Less: Other Operating Revenue	(15,157)
Interest Income	(13,901)
Misc. Income	<u>(170)</u>
Revenue Required From Water Sales	408,470
Revenue from Sales at Present Rates	<u>366,975</u>
Required Revenue Increase	<u>41,494</u>
Percentage Increase	<u><u>11.31%</u></u>

To determine the reasonableness of the rates requested by North Logan District #1, Staff performed a limited financial review of North Logan District #1's test-year operations. The scope of Staff's review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable<sup>10</sup> changes to test-year operations were identified and adjustments made

---

<sup>8</sup> Application, Attachment 4, Revenue Requirements Calculation.

<sup>9</sup> Application, Attachment 1, Customer Notice.

<sup>10</sup> Commission regulation 807 KAR 5:076, Section 9 sets the standard for the determination of the reasonableness of proposed rates and states, in pertinent part, that the test period shall be "adjusted for

when their effects were deemed material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

Staff's findings are summarized in this report. William Foley reviewed the calculation of North Logan District #1's Overall Revenue Requirement. Jason Green reviewed North Logan District #1's reported revenues and rate design.

### SUMMARY OF FINDINGS

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Debt Service Coverage (DSC) method, as generally accepted by the Commission, Staff found that North Logan District #1's required revenue from rates is \$366,975 to meet the Overall Revenue Requirement of \$444,678 and that a \$47,567 revenue increase, or 12.96 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. Monthly Water Service Rates. Based upon the revenue requirement, North Logan District #1 proposed to increase all of its monthly retail water service rates evenly across the board by approximately 11.31 percent. North Logan District #1 did not perform a cost of service study (COSS). In response to Staff's First Request, North Logan District #1 stated that it did not complete a COSS at this time, as there has not been any material change in the water system to warrant a COSS.<sup>11</sup>

---

known and measurable changes." See also Case No. 2001-00211, *The Application of Hardin County Water District No. 1 for (1) Issuance of Certificate of Public Convenience and Necessity; (2) Authorization to Borrow Funds and to Issue its Evidence of Indebtedness Therefor; (3) Authority to Adjust Rates; and (4) Approval to Revise and Adjust Tariff* (Ky. PSC Mar. 1, 2002); Case No. 2002-00105, *Application of Northern Kentucky Water District for (A) an Adjustment of Rates; (B) a Certificate of Public Convenience and Necessity for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds* (Ky. PSC June 25, 2003); Case No. 2017-00417, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works* (Ky. PSC July 12, 2018).

<sup>11</sup> North Logan District #1's Response to Staff's First Request (filed Sept. 10, 2021), Item 11.

The Commission has previously found that the allocation of a revenue adjustment evenly across the board to a utility's rate design is appropriate when there has been no evidence entered into the record demonstrating that this method is unreasonable and in the absence of a COSS. Finding no such evidence in this case, Staff followed the method proposed by North Logan District #1 and allocated the \$47,568 revenue increase across the board to North Logan District #1's monthly retail water service rates.

The rates set forth in the Appendix to this report are based upon the revenue requirement, as calculated by Staff, and will produce sufficient revenues from water sales to recover the \$414,543 Revenue Required from Water Sales, an approximate 12.96 percent increase. These rates will increase a typical residential customer's monthly water bill from \$33.62 to \$37.98, an increase of \$4.36 or approximately 12.97 percent.<sup>12</sup>

3. Nonrecurring Charges. Following the Commission's recent decisions,<sup>13</sup> Staff has reviewed North Logan District #1's Nonrecurring Charges. The Commission found that as district personnel are currently paid during normal business hours, estimated labor costs previously included in determining the amount of Nonrecurring Charges should be eliminated from the charges. In response to Staff's First Request, North Logan District #1 provided updated cost justification information for the Nonrecurring Charges that are listed in its tariff.<sup>14</sup> Staff reviewed the cost justification

---

<sup>12</sup> The typical residential customer uses approximately 3,000 gallons per month.

<sup>13</sup> Case No. 2020-00141, *Electronic Application of Hyden-Leslie County Water District for an Alternative Rate Adjustment* (Ky. PSC Nov. 6, 2020), Case No. 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 3, 2020), Case No. 2020-00196, *Electronic Application of West Daviess County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 30, 2020), and Case No. 2020-00195, *Electronic Application of Southeast Daviess County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 30, 2020).

<sup>14</sup> North Logan District #1's Response to Staff's First Request (filed Sept. 10, 2021), Item 7 Cost\_Justifications\_NRC.pdf.

information provided by North Logan District #1 and have adjusted these charges by removing Field Labor Costs and Office/Clerical Labor Costs. Such adjustments result in the following revised Nonrecurring Charges:

<u>Nonrecurring Charges</u>		
	<u>Normal Hours</u>	<u>After Hours</u>
Return Check Fee	\$ 5.00	\$ -
Re-Connect Fee	10.00	95.00
Connection/ Turn-on Fee	5.00	45.00
Service Call/ Investigation Fee	5.00	45.00

The adjustments to the Nonrecurring Charges results in a decrease in Other Operating Revenue of \$1,200 as shown below.

<u>Charges</u>	<u>Number of Occurrences</u>	<u>Utility Pro Forma</u>	<u>Adjustment</u>	<u>Staff Pro Forma</u>
Returned Check Fee	1	\$ 25	\$ (20)	\$ 5
Customer Deposit	52	5,720	-	5,720
Connection/ Turn-on Fee	59	1,475	(1,180)	295
Meter Relocation	1	233	0	233
Totals		<u>\$ 7,453</u>	<u>\$ (1,200)</u>	<u>\$ 6,253</u>

### PRO FORMA OPERATING STATEMENT

North Logan District #1's Pro Forma Operating Statement for the test year ended December 31, 2020, as determined by Staff, appears below.

	<u>Test Year</u>	<u>Adjustment</u>	<u>(Ref.)</u>	<u>Pro Forma</u>
<b>Operating Revenues</b>				
Total Metered Water Sales	394,205	(27,230)	(A)	366,975
<b>Other Water Revenues</b>				
Forfeited Discounts	1,181	7,319	(B)	8,500
Misc. Service Revenues	17,516	(11,394)	(C)	
		(1,200)	(D)	4,922
<b>Total Operating Revenues</b>	<b>412,902</b>	<b>(32,505)</b>		<b>380,397</b>
<b>Operating Expenses</b>				
<b>Operation and Maintenance Expenses</b>				
Salaries and Wages - Employees	46,762	35,418	(E)	82,180
Salaries and Wages - Officers	18,000			18,000
Employee Pensions and Benefits	3,914	2,289	(F)	
		2,642	(F)	
		9,274	(G)	18,119
Purchased Water	184,533	(6,398)	(H)	
		(10,906)	(I)	167,229
Purchased Power	7,332	(449)	(I)	6,883
Materials and Supplies	50,634	(11,394)	(J)	39,240
Contractual Services-Acct	19,992			19,992
Contractual Services - Management Fees	12,525			12,525
Contractual Services- Water Testing	3,014			3,014
Transportation Expenses	12,897			12,897
Insurance- General Liability & Other	4,422			4,422
Insurance- Workers Comp	1,865			1,865
Advertising	911			911
<b>Total Operation and Maintenance Expenses</b>	<b>366,801</b>	<b>20,476</b>		<b>387,277</b>
Depreciation	79,267	(38,363)	(K)	
		(268)	(L)	40,636
Taxes Other Than Income	5,159	2,709	(M)	7,868
<b>Utility Operating Expenses</b>	<b>451,227</b>	<b>(15,446)</b>		<b>435,781</b>
<b>Net Operating Income</b>	<b>(38,325)</b>	<b>(17,059)</b>		<b>(55,384)</b>
Interest and Dividend Income	3,602	10,300	(N)	
		2,642	(F)	16,544
Nonutility Income	170			170
Interest Expense	768			768
<b>Income Available to Service Debt</b>	<b>(33,785)</b>	<b>(4,117)</b>		<b>(37,902)</b>

(A) Billing Analysis Adjustment. North Logan District #1 provided a billing analysis listing the water usage and water sales revenue for the 12-month test year in its application. The total metered water sales revenue reported for the test year is

\$394,205.<sup>15</sup> During the test year, North Logan District #1 decreased its service rates through a purchase water adjustment (PWA), due to a decrease from its supplier.<sup>16</sup> North Logan District #1 used the billing analysis to calculate a normalized revenue amount based on the usage during the test year using the rates authorized in the final Order for that case. Subsequently, North Logan District #1 decreased test year water sales revenue by \$27,230 to reflect the decrease in rates. Staff agrees with North Logan District #1's proposed revenue adjustment.

(B) Other Water Revenues-Forfeited Discounts. In its application, North Logan District #1 proposed to increase Forfeited Discount Revenues by \$7,854<sup>17</sup> to account for the moratorium regarding the collection of late payment fees from March through December 2020 due to the COVID-19 pandemic. For this adjustment, North Logan District #1 decided to increase the test year late fees to the same amount as the late fees recorded for 2019. Staff disagrees with North Logan District #1's decision to only use 2019's late fees as the benchmark, and instead averaged the past three year's late payment fees to provide a more accurate estimation for the test-year Forfeited Discounts.<sup>18</sup> Therefore, Staff increased Forfeited Discounts Revenue by \$7,319.

---

<sup>15</sup> Annual Report at 49.

<sup>16</sup> Case No. 2020-00221, *Electronic Purchased Water Adjustment Filing of North Logan Water District #1* (Ky. PSC July 7, 2020).

<sup>17</sup> Application, Statement of Adjusted Operations, Adjustment B.

<sup>18</sup> North Logan District #1's Supplement to Response to Staff's First Request (filed Oct. 13, 2021).

Year	Forfeited Discounts
2017	\$ 7,370
2018	9,096
2019	<u>9,035</u>
Average Collected	8,500
Test Year Forfeited Discounts	<u>(1,181)</u>
Forfeited Discounts Adjustment	<u>\$ 7,319</u>

(C) Water Tap Revenues. In its application, North Logan District #1 reported Miscellaneous Service Revenues of \$17,516;<sup>19</sup> which included \$11,394 in water tap revenues. North Logan District #1 proposed to remove the \$11,394.<sup>20</sup> In the test year, North Logan District #1 installed 13 new meters. Tap-on fees are considered contributed capital, and it is not proper to recognize the collections of tap fees as revenue. Staff agrees with North Logan District #1's decision to remove Water Tap Revenues from Miscellaneous Service Revenues. Therefore, Staff made a decrease to Miscellaneous Service Revenues of \$11,394.

(D) Other Water Revenues–Nonrecurring Charges. As shown above, the adjustments to the Nonrecurring Charges results in a decrease in Other Operating Revenue of \$1,200.

(E) Salaries and Wages-Employees. In its application, North Logan District #1 proposed an adjustment increasing Salaries and Wages-Employees Expense by \$34,601.<sup>21</sup> The adjustment was proposed to account for increases in the Employee

---

<sup>19</sup> Application, Attachment 4.

<sup>20</sup> *Id.*, Adjustment C.

<sup>21</sup> *Id.*, Statement of Adjusted Operations, Adjustment D.

Salaries and the hiring of a new full time employee subsequent to the test year.<sup>22</sup> In response to Staff's First Request, North Logan District #1 provided Staff with job responsibilities and salaries,<sup>23</sup> and Staff used the information to calculate Salaries and Wages-Employees expense as \$82,180. Therefore, Staff made an increase to Salaries and Wages-Employees of \$35,418 as shown below.

Employee Position	Total Hours	Test Year Normal Hours	Current Wages Rates	Pro Forma Normal Wages	Test Year Overtime Hours	Current Overtime Wage Rates	Pro Forma Overtime Wages	Total Pro Forma Wages
Operator			\$ 42,680	Salary				\$ 42,680
Operator (In-Training)			39,500	Salary			-	39,500
		-				Pro Forma Wages		\$ 82,180
						Less: Test Year Wages		(46,762)
						Pro Forma Adjustment		\$ 35,418

(F) Employee Pensions and Benefits-Retirement Contribution. In its application, North Logan District #1 proposed to increase Employee Pensions and Benefits Expense by \$2,370<sup>24</sup> to reflect a retirement contributions increase due to an increase in employee's Salaries and Wages. Utilizing the salaries and wages total calculated in adjustment (E) and North Logan District #1's contribution rate of 6 percent,<sup>25</sup> Staff calculated the employer contributions to employee's retirement plan as \$4,931. Therefore, Staff increased Employee Pensions and Benefits by \$2,289 as shown below.

<sup>22</sup> In May 2021, North Logan District #1 hired a full-time employee to replace a part-time employee.

<sup>23</sup> North Logan District #1's Response to Staff's First Request (filed Sept. 10, 2021), Item 1f, Employee\_Information.pdf.

<sup>24</sup> Application, Schedule of Adjusted Operations, Adjustment E.

<sup>25</sup> *Id.*

In addition, North Logan District #1 recorded the test-year pension contributions as part of Interest and Dividend Income. Staff decided to reclassify the expense as part of Employee Pensions and Benefits instead of Interest and Dividend Income. Therefore, Staff increased Employee Pensions and Benefits by \$2,642 and made a subsequent increase to Interest and Dividend Income.

Pro Forma Salaries and Wages- Employees	\$	82,180
Times: 6.00% Retirement Contribution Rate		<u>6.00%</u>
Pro Forma Employee Pension Contribution		4,931
Less: Test Year Employee Pensions and Benefits <sup>26</sup>		<u>(2,642)</u>
Employee Pensions and Benefits Adjustment	\$	2,289

(G) Employee Pensions and Benefits-Insurance Premiums. In its application, North Logan District #1 proposed an increase to its Employee Pensions and Benefits expense by \$8,618.<sup>27</sup> The adjustment reflects North Logan District #1’s limit for employer’s contribution to employee health insurance expenses adjustment to the insurance, as well as subsequent to the test year, North Logan District #1 is paying a portion of the new full time employee’s health, life, and disability insurance.

The Commission continues to place greater emphasis on evaluating employees’ total compensation packages, including both salary and benefits programs, for market and geographic competitiveness to ensure the development of a fair, just and reasonable

---

<sup>26</sup> North Logan District #1’s Response to Staff’s First Request (filed Sept. 10, 2021), Item 1a, NLWD-\_2020\_TB.pdf.

<sup>27</sup> Application, Schedule of Adjusted Operations, Adjustment F.

rate. The Commission has found that, in most cases, 100 percent of employer-funded health care does not meet those criteria.<sup>28</sup>

Consistent with precedent in which the Commission has reduced benefit expenses for utilities that pay 100 percent of an employee’s health insurance coverage, Staff reduced North Logan District #1’s single health insurance premiums by 22 percent,<sup>29</sup> family health insurance premiums by 34 percent,<sup>30</sup> and dental insurance premiums by 40 percent<sup>31</sup> as shown in the calculation below. Accordingly, Staff increased Employee Pensions and Benefits by \$9,274.

Type of Premium	Employer Contributions	Average Employee Contribution Rate	Monthly Premium Adjustment	Pro Forma Monthly Premium
Single Health Insurance <sup>32</sup>	\$ 243	22%	\$ (53)	\$ 190
Family Health Insurance	1,236	34%	(420)	816
Dental and Vision Insurance	155	40%	(62)	93
Total Pro Forma Monthly Premium				1,099
Times: 12 Months				12
Total Annual Pro Forma Premium				13,188
Less: Test Year				(3,914)
Adjustment				<u>\$ 9,274</u>

<sup>28</sup> Case No. 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 2, 2020). Case No. 2020-00296, *Electronic Application of Allen County Water District for an Alternative Rate Adjustment* (Ky. PSC Feb. 3, 2021).

<sup>29</sup> Bureau of Labor Statistics, *Healthcare Benefits*, March 2020, Table 3, private industry workers. (<https://www.bls.gov/news.release/pdf/ebs2.pdf>).

<sup>30</sup> *Id.*, Table 4, private industry workers. (<https://www.bls.gov/news.release/pdf/ebs2.pdf>).

<sup>31</sup> Case No. 2019-00268, *Application of Knott County Water and Sewer District for an Alternative Rate Adjustment* (Ky. PSC Mar. 24, 2020). Case No. 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment* (Ky. PSC Mar. 5, 2021). Case No. 2020-00296, *Electronic Application of Allen County Water District for an Alternative Rate Adjustment* (Ky. PSC Feb. 3, 2021).

<sup>32</sup>

Tier	Health	Medicare Part D	Medicare Supplement	Dental and Vision	Total
EMP	\$ -	\$ 24	\$ 219	\$ -	\$ 243
FAM	1,236	-	-	155	1,391
	1,236	\$ 24	\$ 219	\$ 155	\$ 1,634

(H) Purchased Water. In its test year, North Logan District #1 reported a purchased water expense of \$184,533.<sup>33</sup> During the test year, North Logan District #1 filed and was approved for a PWA in Case No. 2020-00221. In order to annualize the purchased water, Staff calculated a Purchased Water expense using the new rate. This results in a purchased water expense of \$263,509. Therefore, Staff decreased Purchased Water Expense by \$6,398 in order to reconcile the test-year amount with the reported purchased amount as shown below.

Period	Purchased Water		Total
	Thousand Gallons Purchased	Dollars per 1,000 Gallon	
Jan-2020	4,361	\$ 3.33	\$ 14,522
Feb-2020	4,157	3.33	13,843
Mar-2020	4,454	3.33	14,832
Apr-2020	4,604	3.33	15,331
May-2020	5,006	3.33	16,670
Jun-2020	5,065	3.33	16,866
Jul-2020	4,967	3.33	16,540
Aug-2020	5,622	3.33	18,721
Sep-2020	4,352	3.33	14,492
Oct-2020	3,340	3.33	11,122
Nov-2020	3,721	3.33	12,391
Dec-2020	3,845	3.33	12,804
		Purchased Water Expense	178,135
		Test Year Purchased Water	184,533
		Adjustment	\$ (6,398)

(I) Expenses Attributable to Excess Water Loss. In its application, North Logan District #1 proposed an adjustment of \$11,282 decrease to Purchase Water and Purchased Power to account for excess water loss.<sup>34</sup> This adjustment is in accordance

<sup>33</sup> Application, Schedule of Adjusted Operations.

<sup>34</sup> *Id.*, Adjustment H.

with Commission precedent of not allowing recovery of expenses for water loss in excess of 15 percent. Staff agrees with North Logan District #1’s methodology. However, Staff disagrees with North Logan District #1’s proposed adjustments. When adjustment (H) is included in the purchased water calculation, it results in a decrease to Purchased Water Expense of \$10,906 and Purchased Power Expense by \$449. The adjustments result in a net decrease to Revenue Requirement of \$11,355 as shown in the table below.

	Purchased Water	Purchased Power
Purchased Water from 2019 Annual Report	\$ 178,135	\$ 7,332
Times: Water loss Above 15 Percent	-6.12%	-6.12%
Excess Water Loss Reductions	<u>\$ (10,906)</u>	<u>\$ (449)</u>
Total		<u><u>\$ (11,355)</u></u>

(J) Expenses Related to Meter Installations. During the test year, North Logan District #1 proposed an adjustment decreasing Materials and Supplies by \$11,394<sup>35</sup> to reflect the reduction of the capital costs for the installation of 13 new water connections. North Logan District #1 recorded payments to contractors and the materials used for the installation of new meter services to account No. 5170-Repairs and Maintenance. The Uniform System of Accounts for Class A/B Water Systems (USoA) requires that these costs be capitalized as Utility Plant in Service and depreciated over their estimated useful lives.<sup>36</sup> Therefore, Staff agrees with North Logan District #1 that Materials and Supplies

---

<sup>35</sup> *Id.*, Adjustment I.

<sup>36</sup> USoA, Accounting Instruction 19 and 33.

need to be reduced by \$11,394. In addition, Staff has capitalized the costs and made a corresponding adjustment to test-year depreciation as shown in adjustment (L).

(K) Depreciation Expense. In its application, North Logan District #1 proposed to reduce its test year Depreciation Expense of \$79,267 by \$38,288.<sup>37</sup> To evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the report published in 1979 by the National Association of Regulatory Utility Commissioners (NARUC) titled Depreciation Practices for Small Water Utilities (NARUC Study). When no evidence exists to support a specific life that is outside the NARUC ranges, the Commission has historically used the midpoint of the NARUC ranges to depreciate the utility plant. Upon examination, Staff agrees with North Logan District #1's methodology to adjust Depreciation expense, however, Staff calculated the depreciation expense of \$40,904. Staff found no evidence to support depreciable lives that vary significantly from the midpoint of the NARUC ranges. Therefore, Staff decreased North Logan District #1's Expense by \$38,363 to \$40,904 as shown below.

Asset Group	Current Depreciation	Pro Forma Depreciation	Depreciation Adjustment
Group: 1125 Software	\$ -	\$ -	\$ -
Group: 1120 Building	652	606	(46)
Group: 1125 Software	-	-	-
Group: 1130 Meters and Instal	6,887	7,140	253
Group: 1150 Dist Reservoirs	15,140	13,168	(1,972)
Group: 1160 Trans And Dist Main	56,241	19,882	(36,359)
Group: 1170 Service	124	-	(124)
Group: 1180 Hydrants	32	32	-
Group: 1195 Capitalized Interest	191	76	(115)
Total:	\$ 79,267	\$ 40,904	\$ (38,363)

<sup>37</sup> Application, Schedule of Adjusted Operations, Adjustment J.

(L) Capitalization of Test-Year Water Taps. As explained in adjustment (J) above, the expenses related to the installation of new water connections are capital expenditures that should be capitalized as Utility Plant in Service and depreciated over their estimated useful lives. Therefore, Staff calculated the annual depreciation amount for the test year and increased depreciation expense by \$268 as shown below.

Test Year Water Connections Expenses	(11,394)
Divided by: Useful Life of 42.5 Years	<u>42.5</u>
Pro Forma Depreciation Adjustment	<u>\$ (268)</u>

(M) Taxes Other Than Income-FICA. In its application, North Logan District #1 proposed to increase its Taxes Other Than Income expense by \$1,051<sup>38</sup> to reflect an increase to payroll taxes due to an increase to salaries and wages. Upon examination, Staff agrees with North Logan District #1's methodology, however, as explained in adjustment (E) above, Staff increase Salaries and Wages Expense by \$35,418. Therefore, Staff calculated an increase to Taxes Other Than Income of \$2,709 to \$7,868.

<u>Taxes other than Income- FICA</u>	
Pro Forma Wage Adjustment	\$ 35,418
Times: 7.65 Percent FICA Rate	<u>7.65%</u>
FICA Adjustment	<u>\$ 2,709</u>

(N) Unrecognized Losses. In its application, North Logan District #1 proposed to increase Interest and Dividend Income by \$10,300<sup>39</sup> to reflect a prior period adjustment for Unrecognized Losses and explained that these losses are not expected in the future,

---

<sup>38</sup> *Id.*, Adjustment D.

<sup>39</sup> *Id.*, Adjustment M.

so that amount was added to normalize income. On October 8, 2021, Staff spoke to North Logan District #1's auditor and confirmed that Unrecognized Gains and Losses is an adjustment, recorded monthly, to ensure the balance sheet reflects the current market value for North Logan District #1's investments. The recognition of unrecognized gains or losses is a non-cash item, and is made to adjust the proper balance to the asset account on the balance sheet and is neither an expense nor a revenue to North Logan District #1. These amounts should not be included in Interest and Dividend Income for ratemaking purposes. Therefore, Staff increased Interest and Dividend Income by \$10,300.

#### OVERALL REVENUE REQUIREMENT AND REQUIRED REVENUE INCREASE

The Commission has historically applied a DSC method to calculate the Overall Revenue Requirement of water districts and water associations. This method allows for recovery of (1) cash-related pro forma operating expenses; (2) recovery of depreciation expense, a non-cash item, to provide working capital;<sup>40</sup> (3) the average annual principal and interest payments on all long-term debts; and (4) working capital that is in addition to depreciation expense.

---

<sup>40</sup> The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds for renewing and replacing assets. See *Public Serv. Comm'n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky. 1986). Although a water district's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district's general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. See Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

	North Logan Water District #1	Staff	
Pro Forma Operating Expenses	\$ 428,779	\$ 435,781	
Plus: Avg. Annual Principal and Interest Payments	7,433	7,414	(1)
Additional Working Capital	<u>1,487</u>	<u>1,483</u>	(2)
 Total Revenues Requirement	 437,698	 444,678	
Less: Other Operating Revenue	(15,157)	(13,422)	
Interest Income	(13,901)	(16,544)	
Misc. Income	<u>(170)</u>	<u>(170)</u>	
 Revenue Required From Water Sales	 408,470	 \$ 414,542	
Revenue from Sales at Present Rates	<u>(366,975)</u>	<u>\$ (366,975)</u>	
 Required Revenue Increase	 <u>41,494</u>	 <u>47,567</u>	
Percentage Increase	<u>11.31%</u>	<u>12.96%</u>	

1. Average Annual Principal and Interest Payments. At the time of Staff's review, North Logan District #1 had one outstanding loan from the Kentucky Infrastructure Authority (KIA). In its application, North Logan District #1 requested recovery of the average annual principal and interest on its indebtedness based on a five-year average of the annual principal, and interest and fee payments for the years 2022 through 2026.<sup>41</sup> Staff agrees with the methodology North Logan District #1 proposes. As shown below, Staff calculated an Average Principal and Interest Payment of \$7,414.

---

<sup>41</sup> Application, Attachment 4, Table B.

<u>2022-2026 Five-Year Average of Debt Payments</u>			
<u>Year</u>	<u>KIA Loan Payable<sup>42</sup></u>		<u>Total</u>
	<u>Principal</u>	<u>Interest</u>	
2022	24,409.42	306.17	\$ 24,716
2023	12,294.08	61.47	12,356
2024			-
2025			-
2026			-
Totals	36,704	368	37,071
Divide by: 5 years			5
Average Annual Interest Payment			<u>7,414</u>

2. Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by a district's lenders that are above its average annual debt payments. In its application, North Logan District #1 requested recovery of an allowance for working capital that is equal to 120 percent of its average annual debt payments for its loan payable to KIA at the time of its application.

USDA/RD requires that North Logan District #1 charge rates that produce net revenues that are at least 120 percent of its average annual debt payments. Following the Commission's historic practice, Staff agrees with North Logan District #1's revised methodology. Therefore, \$1,483 is included it in the revenue requirement.

Average Annual Principal and Interest	\$7,414
Times: DSC Coverage Ratio	<u>120%</u>
Total Net Revenues Required	8,897
Less: Average Annual Principal and Interest Payments	<u>(7,414)</u>
Additional Working Capital	<u>\$1,483</u>

<sup>42</sup> Case No. 2002-00051, *The Application of North Logan Water District for a Certificate of Public Convenience and Necessity to Construct, Finance and Increase Rates Pursuant to KRS 278.023* (Ky. PSC Mar. 19, 2002).

Signatures

          /s/ William M. Foley            
Prepared by: William Foley  
Revenue Requirements Branch  
Division of Financial Analysis

          /s/ Jason Green            
Prepared by: Jason Green  
Rate Design Branch  
Division of Financial Analysis

APPENDIX

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2021-00286 DATED OCT 21 2021

Monthly Water Rates

First 2,000 Gallons	\$26.07 Minimum Bill
Next 2,000 Gallons	0.01191 Per Gallon
Next 6,000 Gallons	0.00760 Per Gallon
Next 15,000 Gallons	0.00721 Per Gallon
Over 25,000 Gallons	0.00681 Per Gallon

Nonrecurring Charges

Returned Check Charge	\$5.00
Reconnection Fee	\$10.00
Reconnection Fee (After Hours)	\$95.00
Connection/Turn-On Charge	\$5.00
Connection/Turn-On Charge (After Hours)	\$45.00
Service Call/Investigation	\$5.00
Service Call/Investigation (After Hours)	\$45.00

\*Alan Vilines  
Kentucky Rural Water Association  
Post Office Box 1424  
1151 Old Porter Pike  
Bowling Green, KENTUCKY 42102-1424

\*North Logan Water District #1  
3118 Lewisburg Road  
Russellville, KY 42276

\*Stewart C. Smotherman  
Chairman  
North Logan Water District #1  
3118 Lewisburg Road  
Russellville, KY 42276